

BONDING OF MATERIALS WITH INDUCTION HEATING**Abstract of the Disclosure**

An apparatus and process are provided for bonding of materials by induction heating of an electrically conductive material upon which a second material is bonded. The electrically conductive material is induction heated between a first induction heating plate, and the combination of a frame and a second induction heating plate that is disposed within the frame. The second induction heating plate is removed from the surface of the electrically conductive sheet, while the frame continues to hold the electrically conductive sheet flat, and the second material, in liquid form, is poured into the interior opening of the frame in which the second induction heating plate was originally placed. The liquid material solidifies and bonds to the electrically conductive sheet to produce a bonded product. A continuous sheet of an electrically conductive material may be bonded to a continuous sheet of a second material by pressing them together and moving the pressed together materials through an induction coil to inductively heat the electrically conductive material and bond it with the second material.